

REMARKS

In an Office Action dated April 6, 2005, the Examiner (1) objected to the specification, (2) rejected Claim 15 under 35 U.S.C. § 112, second paragraph, (3) rejected Claims 1-3 and 10-12 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,163,008 to Gerber, (4) rejected Claims 1-6 and 10-13 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,154,941 to Cadena et al., (5) objected to Claims 7-9 and 14 as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and (6) stated Claim 15 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112, second paragraph, and to include all of the limitations of the base claim and any intervening claim. By this response, Applicants amend Claim 1, 4, 5, 10, 13, and 15 and add new Claims 16-19.

Applicants have amended paragraph [0014], line 1. Applicants have changed "shaft 28" to "shaft 18". Applicants respectfully submit that the Examiner's objection to the disclosure is overcome.

The Examiner rejected Claim 15 under 35 U.S.C. § 112, second paragraph, as being indefinite for failure to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. The Examiner also stated that Claim 15 would be allowable if the rejection under 35 U.S.C. § 112 was overcome and Claim 15 was rewritten in independent form to include each and every limitation of any base and any intervening claim. Applicants have amended Claim 15 to be in independent form and also have amended Claim 15 to overcome the rejection under 35 U.S.C. § 112. Applicants respectfully submit that Claim 15 is in a condition for allowance.

The Examiner rejected Claims 1-3 and 10-12 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,163,008 to Gerber. Gerber discloses a method and apparatus for advancing sheet material for the cutting of successive segments thereof. The device in Gerber includes motors that position cutting tools such as a reciprocating knife. The cutting head is coordinate axis driven by feedback control or positioning circuit using a drive motor and an encoder assigned to that axis. A reciprocating motor in the cutting head drives the cutting tool in the reciprocating motion and another motor (not shown) rotates the cutting tool under control of the controller 54 in the θ direction about the axis 35 to keep the tool facing forwardly along the line of cut. A solenoid 52 carried by the cutter head 36 is operable to move the cutter head frame and therewith the cutting tool. The computer implemented controller 54 applies the necessary commands to operate the X and Y motors 48 and 44, the solenoid and other parts of the machine so that the tool 32 is moved along the desired lines of cut relative to the work material positioned at the cutting station 26.

Applicants respectfully submit that Gerber does not show as in amended Claims 1 and 10, or the claims depending therefrom, a first biasing assembly urging the tool holder to a linearly centered position and a second biasing assembly urging the tool holder to a rotationally centered position. Gerber does not show any biasing elements but instead uses motors to position the tool head and cutting member. Furthermore, Gerber teaches directly away from the present invention and the use of biasing assemblies in that, in Gerber, it is very important, as described in the abstract and throughout the specification, to prevent accidental shifting or mispositioning of the material and for exact cutting along X, Y coordinates to avoid or reduce discontinuities which translate into points of non-clean cutting. Furthermore, Gerber states in the background of the invention in Column 2 that the general object of the invention is to provide a

method and apparatus for use in the automatic cutting of sheet material to overcome or reduce cutting problems arising from accidental shifting, flexural displacement or mispositioning of the work material relative to the coordinate axis of a cutting machine or an advancement of the work material relative to the cutting station. Therefore, Gerber teaches directly away from the use of any biasing assemblies. Any use of a biasing assembly along the linearly centered position or rotationally centered position in Gerber would cause discrepancies between the expected cut and the actual cut. In regards to new Claim 19, Gerber teaches only the use of electric motors to move the cutting head both in a reciprocal, rotational, and positioning and does not teach a trimming assembly for trimming flash from a workpiece which includes a tool holder coupled to the support block and rotatable relative to the support block about a rotational axis wherein rotation about the rotational axis is completely mechanical. Applicants respectfully submit that in Gerber rotation of the tool holder is done by an electric motor and therefore is not completely mechanical.

The Examiner rejected Claims 1-6 and 10-13 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,154,941 to Cadena.

Cadena is directed to a crankshaft thrust face burnisher and method. The burnisher does include a spring construction that provides for the movement of the burnisher burnishing tool laterally into a centered working position relative the opposing surface of the crankshaft when sufficient turning force or torque is applied to the burnishing tool. However, Cadena discloses a pair of actuators (not shown) operatively connected to the burnishing tool with the first actuator adopted to advance the burnishing tool between the retracted and operating positions and the second actuator turning the burnishing tool into engagement with the thrust face so that the hardened work rollers of the burnishing tool contact the thrust faces under torsional load, as best

seen in FIG. 3. The burnishing assembly does contain a housing and the housing is centered with the spring assembly. The biasing member 66 that centers the housing does include a plunger 82 and a spring 84, to permit the burnishing tool to float laterally.

Applicants respectfully submit that although Cadena discloses a biasing assembly, similar to the first biasing assembly of the present invention, it does not disclose a second biasing assembly. As stated in Cadena, the second actuator turns the burnishing tool with enough torsional load to achieve sufficient engagement to the cam shaft surfaces. Cadena does not disclose a second biasing assembly urging the tool holder to a rotationally centered position. Furthermore, Cadena does not disclose a support block coupled to the housing and movable relative to the housing. In Cadena, even if the support block was considered coupled to the housing, the complete housing is moved by the biasing assembly and therefore is not movable relative to the housing. Being relative to the housing allows the slide assembly to be located within the housing and therefore provides a compact assembly.

Applicants have rewritten Claim 15 in independent format and respectfully submit that Claim 15 is allowable.

Applicants respectfully submit that new Claims 16-19 are allowable. The references cited by the Examiner do not show a second biasing assembly limiting rotation of the tool holder about a tool axis, a cover having an elongated linear slot wherein the tool holder is disposed within the elongated linear slot for movement along the linear axis, and set screws to adjust the limit of the tool holder's angle of rotation about the rotational axis. Furthermore, the references cited by the Examiner do not show a completely mechanical rotation about the rotational axis and in both references the rotation is driven by an actuator or a motor.

U.S. Application Serial No. 10/664,578
Attorney Docket: 45565-0012
Reply to Office Action of April 6, 2005


Applicants respectfully submit that all of the pending claims are in a condition for allowance. If the Examiner believes that personal communication would expedite the prosecution of this application, please telephone the undersigned at (248) 433-7231.

Prompt and favorable consideration and allowance of this application is respectfully requested.

Respectfully submitted,

DICKINSON WRIGHT PLLC
Attorneys for Applicants

Date: 7-5-05

By: 
Craig A. Phillips
Reg. No. 47,858

Dickinson Wright PLLC
1901 L Street, NW
Suite 800
Washington, D.C. 20036
(248) 433-7231

CAP/gmp
Enclosures

BLOOMFIELD 45565-12 701886v1